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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,385	04/20/2001	Mark A. Smith	10001074-1	2505

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2861

DATE MAILED: 05/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/839,385

Applicant(s)

SMITH ET AL.

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 March 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment filed March 21, 2002 has been acknowledged.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomikawa et al. (US 6,039,441) in view of Ma et al. (US 5,085,698).

Tomikawa et al. discloses the claimed features of the invention including:

- a replaceable ink container (Fig. 1a) for providing ink to an inkjet printing system (Fig. 5b) and method for forming a seal (Fig. 1b), the inkjet printing system having a replaceable printhead (21) and a receiving station (27) for receiving the replaceable ink container, the receiving station having a fluid inlet (24) and a sealing structure (22), the replaceable ink container comprising:
 - a reservoir (2) defining a fluid outlet (11) and a sealing surface (14) proximate the fluid outlet (Fig. 1b);

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- a sealing material (ink in 2) contained within the reservoir for wetting the sealing surface (column 5, lines 59-60) to seal defects between the sealing surface and the sealing structure (ink meniscus effect),
- the reservoir contains a quantity of ink (Fig. 1a),
- the sealing surface is configured to be sufficiently wettable such that the sealing surface is wet by the sealing material (wet by ink, column 5, lines 59-60),
- a storage reservoir having a capillary storage material (3) disposed therein for retaining ink.

However, Tomikawa et al. does not disclose the following claimed features:

- the sealing material including solid particles held in a suspension,
- the solid particles are pigment particles,
- the solid particles are carbon black particles,
- the suspension is a dispersant.

Nevertheless, Ma et al. discloses an ink containing carbon black particles (column 8, lines 38-39) for the purpose of providing black pigments (column 8, lines 38-39) and a dispersant (column 9, lines 29-30) for the purpose of dispersing the pigment particles (column 9, lines 40-41).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Tomikawa et al. with ink containing carbon

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black particles and dispersant as disclosed by Ma et al. for the purposes of providing black pigments and dispersing the pigment particles.

Response to Arguments

2. Applicant's arguments filed March 21, 2002 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 and 103 rejections, Applicants argue that Tomikawa does not teach a sealing material including solid particles held in a suspension such that solidification of the solid particles acts to seal defects between the sealing surface of the container and a sealing structure of a receiving station.

Examiner's position is that Tomikawa in view of Ma teaches the claimed invention. In particular, Tomikawa teaches a sealing material (ink in 2) to seal defects between the sealing surface and the sealing structure (ink meniscus effect). Ma teaches an ink containing carbon black particles (column 8, lines 38-39) and a dispersant (column 9, lines 29-30).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

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MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

May 21, 2002